

Survey Requested by SBA S.Y. Vessel Owner or Agent SABINE BANK Date 1-16-88  
Vessel TC 24 Type of Vessel TANK BARGE Specific Location of Vessel SBA/TENNINGS, LA.  
Last Three (3) Cargoes # 6 OIL Test Method O2/LE2/VISUAL Time Survey Completed 12:15 PM

BOW RAKE } SAFE FOR WORKERS  
STERN RAKE } SAFE FOR HOTWORK

CARGO TANKS  
# 1-2-3-4-5 P/S - SAFE FOR WORKERS  
SAFE FOR HOTWORK

PORTABLE AIR VENTILATION REQD. IN WORK TANK.  
(MIN. 1000 CFM)

CARGO LINES & DEEPWELL - WASHED & BLOWN WITH AIR  
SAFE FOR HOTWORK WITH AIR BLOWING  
THRU LINES.

STEAM COILS - SAFE FOR HOTWORK

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

**QUALIFICATIONS:** Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

**STANDARD SAFETY DESIGNATIONS** (partial list, paraphrased from NFPA 306 Subsections 1-6.1 through 1-6.4, and Subsection 5-3.2).

**SAFE FOR WORKERS:** Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

**NOT SAFE FOR WORKERS:** Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

**SAFE FOR HOT WORK:** Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

**NOT SAFE FOR HOT WORK:** Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

**SAFE FOR REPAIR YARD ENTRY:** Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

**CHEMIST'S ENDORSEMENT.** This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under Section 2-3 of NFPA 306 and understands conditions and limitations under which it was issued."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed Davis Michael Date SBA 1-16-88 Signed Ronald P. Price Certificate No. 577



SBA S.Y. Survey Requested by  
TC 25 Vessel  
#6 OIL / CON TAR Last Three (3) Cargoes  
MARINE BANK Vessel Owner or Agent  
TANK BARGE Type of Vessel  
O2 / HEL / VISUAL Test Method  
4-5-88 Date  
SBA / JENNINGS, LA. Specific Location of Vessel  
2:30 PM Time Survey Completed

BOW RAKE } SAFE FOR WORKERS  
STERN RAKE } SAFE FOR HOTWORK

CARGO TANKS  
No. 1-2-3-4-5 P/S - SAFE FOR WORKERS  
SAFE FOR HOTWORK

PORTABLE AIR VENTILATION REQD. IN WORK TANK.  
(MIN. 1000 CFM)

CARGO LINES & DRAINAGE - DRAINED, BLOWN WITH AIR  
SAFE FOR HOTWORK TO BURN BOLTS  
WITH AIR BLOWING THRU LINES.

STEAM COILS - SAFE FOR HOTWORK

THIS IS A REINSPECTION

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**STANDARD SAFETY DESIGNATIONS** (partial list, paraphrased from NFPA 306 Subsections 1-6.1 through 1-6.4, and Subsection 5-3.2).

**SAFE FOR WORKERS:** Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

**NOT SAFE FOR WORKERS:** Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

**SAFE FOR HOT WORK:** Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

**NOT SAFE FOR HOT WORK:** Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

**SAFE FOR REPAIR YARD ENTRY:** Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

**CHEMIST'S ENDORSEMENT.** This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under Section 2-3 of NFPA 306 and understands conditions and limitations under which it was issued."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed Don Whelchel SBA 4-5-88 Signed Jennings 577  
Name Date Marine Chemist Certificate No.